

Bureau of Community and Environmental Health

Summary of BCEH's Public Health Assessment for the Poles, Incorporated Wood Treatment Facility: Oldtown, Idaho

What has happened at the site?

The Bureau of Community and Environmental Health (BCEH), Division of Health, Idaho Department of Health and Welfare, under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR) prepared a draft public health assessment (PHA) addressing contamination found at the Poles, Incorporated (Poles, Inc.) wood treating facility in Oldtown, Idaho. Poles, Inc. is an active wood treatment facility which has operated since 1945. The facility treats wood poles with a mixture of pentachlorophenol (penta) and wood treatment oil.

In August 2001, the U. S. Environmental Protection Agency (EPA) conducted a site investigation at and around Poles, Inc. EPA collected and tested samples of air, sediment, surface and subsurface soils, and groundwater. EPA found penta and polycyclic aromatic hydrocarbons (PAHs) in the onsite soils and in the groundwater directly below the site. Site related contaminants were also found in low concentrations in the air, offsite surface soils, and sediments in the Pend Oreille River. Penta was not found in Idaho Hill Elementary School indoor air and no contaminants were found in the school dust wipe samples.

What are the results of the PHA?

BCEH evaluated the chemical threat to public health based on EPA sampling results. A hazard category was assigned to each exposure pathway according to ATSDR guidelines. ATSDR defines five public health hazard categories: Urgent Health Hazard, Public Health Hazard, Indeterminate Public Health Hazard, No Apparent Public Health Hazard, and No Public Health Hazard.

BCEH evaluated current exposures to environmental media at and around the site. Current exposures to air, surface soils, river sediment, surface water, indoor dust, and biota (fish) are considered no apparent public health hazard. While exposure to contaminants through these media may currently exist, the exposure is below the level expected to cause a health hazard.

There is no completed exposure pathway for subsurface soil or indoor dust. Since no exposure pathway exists, subsurface soil and indoor dust are considered no public health hazard.

It is not known if the public is currently being exposed to contaminated groundwater, or if exposure could occur in the future. Due to a lack of data, exposure to contaminated groundwater is considered an indeterminate health hazard.

Poles, Inc. recently changed its treatment operations by treating logs at night and installing new equipment to reduce air emissions. These changes have reduced the noticeable odors and may have reduced the amount of penta and PAHs released to the air. Past air exposures may have been greater before the changes were made.

Elevated levels of arsenic were found in soil, sediment, and groundwater. These levels are consistent with background levels of arsenic in the region.

Exposure to background arsenic levels is not expected to increase the risk of developing cancer. Arsenic is not considered to be related to site activities. Elevated rates of sarcoma, a rare cancer, were reported in the Oldtown, Newport, and Priest River area between 1992 and 1999. Soft tissue sarcoma, a type of sarcoma,

may be linked to penta exposure. However, a definite association between sarcoma and site-related exposure is not known at this time.

What are BCEH's recommendations?

BCEH is not a regulatory agency, but has developed recommendations to reduce potential exposures to site and non-site related contaminants. The recommendations are as follows:

- Restrict site access to prevent children and other trespassers from entering the site.
- BCEH should educate the public about chemical and physical hazards at the site.
- Workers should remove work clothes prior to entering their homes. Work clothes should be washed separately from other clothes.
- Odor should be further controlled. The community is encouraged to document odors and report them to the Idaho Department of Environmental Quality (IDEQ).
- Install proper spill prevention and containment to prevent release of contaminants.
- Conduct a well survey to find out if groundwater has been used for drinking, irrigation, or other purposes near the site.
- Install additional monitoring wells down gradient from the site and monitor them routinely.
- Domestic drinking water wells near the site should be tested for contamination.
- The Cancer Data Registry of Idaho (CDRI) should further investigate the seven sarcoma cases to determine if they are related to exposure to site contaminants. CDRI should further investigate cancer incidence among past and present school employees.
- BCEH should evaluate the results of EPA's dioxin testing.

What actions are planned for the future?

- EPA and IDEQ are negotiating site cleanup and restriction plans with the site owner.
- IDEQ is requesting a more stringent permit in order to control emissions, dust, and odor. EPA and IDEQ will require Poles, Inc. to further investigate, clean up, and/or eliminate public exposure to site contamination.
- EPA and IDEQ will discuss plans with the site owner to control current and future contamination of soils and groundwater.
- EPA will conduct limited sampling for dioxin at the site.
- BCEH will evaluate the results of the dioxin testing.
- The Cancer Analysis Working Group will further investigate the potential link between cancer cases and chemical exposure for the Oldtown area. Information about cancer among the Idaho Hill Elementary School employees will also be evaluated.
- BCEH will provide health education to the community to assist residents in mitigating exposure to the area background soil arsenic.

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